



SCHOOL LIFE



Published twice a month by the DEPARTMENT OF THE INTERIOR, Bureau of Education
 Secretary of the Interior, ALBERT B. FALL : Commissioner of Education, P. P. CLAXTON

VOL. VI

WASHINGTON, D. C., APRIL 1, 1921.

No. 7

EDUCATION FOR AMERICANS IN CHINA.

Many Schools Maintained by Americans for Chinese—American Children Not Well Provided for—Number Has Increased Rapidly in Past 20 Years.

By CHARLES L. BOYNTON.

Americans of the present generation have given \$10,000,000 for the education of the Chinese. This money has been an actual gift, offered without hope of any material reward. In Shanghai, Soochow, Canton, Nanking, and a dozen other places there are large colleges, and in hundreds of towns and villages are smaller American schools built for the Chinese, and all maintained by the steady flow of pennies, dimes, and dollars from America. These American schools have had a far-reaching effect on the life of Asia and a great part of the recent progress of the Chinese can be directly credited to them.

The need for an American school for American children in China is great, and it is growing rapidly, for every year there are more American children who demand it. In 1885 there were only 741 Americans in China. Fifteen years later, at the time of the Boxer trouble, there were more than 2,000; and to-day the number is about 7,000. Formerly the American missionaries made up the bulk of this American population, but in recent years more and more Americans are coming out to engage in business, and now the two communities, business and missionary, are about equal. Both communities are rapidly increasing in number and influence. Most of these Americans have been educated in colleges or universities and most of them are married. They occupy positions of responsibility and constitute a class which is particularly anxious to give its children the benefits of the best education obtainable.

Some have sought to solve the problem by home instruction, but this plan has failed here as elsewhere. No matter how good the home instruction may be the children miss the drill, discipline, and competition of the schoolroom. Many parents have sent their children back to America in the care of friends or relatives, but this arrangement has meant long separation, for the journey from America to China takes such a long time and is so expensive that the children can not return with each vacation. Sometimes the mother returns to America with her children, and this means a still more serious breaking up of the family.

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COST OF EDUCATION IN THE UNITED STATES.

Almost Negligible in Comparison with Other Expenditures—More Spent for Luxuries in a Single Year Than for Education in Three Hundred Years.

By P. P. CLAXTON.

Despite the low salaries of teachers and the meager and inadequate equipment of schools, many people believe the support of the public schools, elementary, secondary, and higher, to be our chief burden. This opinion seems to be very common about State legislatures and other tax-levying bodies. People otherwise well informed sometimes fall into this error. Recently a prominent professor in one of our great universities expressed the opinion that the support of the State universities was about to bankrupt some of the States. What are the facts? How do expenditures for the schools compare with other expenditures, public and private? The truth is public education is not a burden. Its cost is almost negligible when compared with other expenditures.

In 1918, the last year for which complete reports have been compiled, we spent in the United States for public education, elementary and secondary, \$762,259,154; for normal schools for the training of teachers, \$20,414,680; for higher education in colleges, universities, and professional and technical schools, whether supported by public taxation or privately endowed, \$137,055,415. The grand total was \$919,729,258. In the 50 years from 1870 to 1920, we paid for public elementary and high schools, \$12,457,484,563; for

WHEREVER WE MAY BE BORN, in stately mansion, or in flat, or tenement, or under the humblest conditions, we are pretty much alike, and it would be a rash man who would try to measure brains by the cost of the nursery. Go anywhere you will, there is a human soul demanding a fair chance, having the right to know what has happened in the world, having the right to be enriched with the stories and poetry of life, having the right to be inspired by the deeds of men of force who have lived amid struggles in the past, having the right to be shown the way upward to that wholesome life which is absolutely independent of circumstances and which is strong and successful because it is the life of a man or a woman doing a man's part or a woman's part in the world which is fairly understood.—Charles E. Hughes.

normal schools, \$291,111,232; for higher education in tax supported and privately endowed colleges, universities, and technical schools, \$1,804,200,272, a total of \$14,552,796,037 for the 50 years.

For the years preceding 1870, two billions of dollars for public elementary and secondary schools, three millions for normal schools, and 150 millions for higher education would be very liberal estimates. Adding these to the totals given above will make a grand total of about \$14,500,000,000 for public elementary and secondary schools; \$295,000,000 for normal schools, and \$1,950,000,000 for higher education;—approximately \$16,645,000,000, for public schools, elementary, secondary, normal schools, and higher education in schools of all kinds from the beginning of our history until 1920.

In all cases the figures include expenditures for buildings and equipment, repairs, heating, lighting, and other incidentals, as well as expenditures for teachers' salaries.

The total amount paid in salaries to teachers in public elementary and secondary schools in 1918, was only \$402,298,516. Salaries of teachers in private elementary and secondary schools, colleges, normal schools, universities, and technical schools amounted to approximately \$90,446,724, making a total of \$492,745,240.

Less than a Billion a Year.

Making all due allowances for defective returns, the total amount spent for public education in 1918, including current expenditures for private and endowed colleges and universities, and all expenditures for capital investment in buildings and equipment, was less than one billion of dollars. According to Government returns for 1920, the people of the United States spent for luxuries in that year \$22,700,000,000; more than 22 times as much as they spent for education only two years before, and six billions, or 30 per cent, more than we have spent for public education in all our history.

Expenditures for luxuries in 1920 included among other items:

For face powder, cosmetics, perfume, etc.	\$750,000,000
Furs	300,000,000
Soft drinks	350,000,000
Toilet soaps	400,000,000
Cigarettes	800,000,000
Cigars	510,000,000
Tobacco and snuff	800,000,000
Jewelry	500,000,000
Luxurious service	3,000,000,000
Joy rides, pleasure resorts, and races	3,000,000,000
Chewing gum	50,000,000
Ice cream	250,000,000
Food luxuries	5,000,000,000

More for Cosmetics than for Teachers.

It is interesting to compare some of these items with the expenditures for education. The amount paid for face powder, cosmetics, and perfumes is only \$12,000,000 less than the total amount expended for public, elementary, and secondary education in 1918, and within \$50,000,000 of twice the total amount of salaries paid teachers in public, elementary, and secondary schools.

The amount paid for jewelry is nearly \$100,000,000 more than the salaries of teachers in elementary and high schools in 1918, and is more than the total of productive funds of all endowed colleges and universities in that year.

The \$50,000,000 for chewing gum is 2½ times the total expenditures for normal schools and almost exactly the same as all State and city appropriations for higher education.

The \$300,000,000 paid for furs is more than twice the total cost of all higher education and the \$350,000,000 paid for soft drinks is more than 2½ times as much. It is more than the total value of college and university buildings, including dormitories in 1918.

Strangely enough the cost of toilet soaps in 1920 and the total salaries of elementary and secondary teachers in 1918 are almost exactly the same. But why should soap be counted as a luxury? The cost of cigarettes in 1920 is twice as much as the salaries of teachers in elementary and high schools, nearly \$40,000,000 more than the total expenditures for elementary and secondary education, and almost the same as the total cost of elementary and secondary education, public and private, including capital investments in new buildings and equipment, and the cost of the heating and lighting of school rooms, and all other expenses for upkeep.

Tobacco's Cost in 1 Year Equals Higher Education Cost in 273 Years.

In 1920 we blew away in smoke of cigars and cigarettes \$300,000,000 more than the total cost of all education in 1918. The total cost for tobacco, in all its forms, in 1920, was five times the total of teachers' salaries in 1918 and almost exactly the same as the total cost for elementary and secondary education for the three years 1916, 1917, and 1918. If in some moment of high enthusiasm and patriotic devotion the people who use tobacco had agreed among themselves to smoke two cigarettes instead of three, two cigars instead of three, take two "chaws" instead of three, and two dips instead of three, and had paid to the support of the schools the money thus saved for the year, the salaries of teachers in schools of all grades, public and private, could have been increased by more than 120 per cent. For tobacco in its various forms we paid more than we have paid for higher education since the founding of Harvard College in Massachusetts and William and Mary in Virginia.

Luxurious service, whatever that may mean, for the single year cost more than the total paid for all public education for the four years from 1915 to 1918, inclusive, and 45 per cent more than higher education has ever cost us. In food luxuries we ate up in a single year more than the salaries of all school teachers for the first 18 years of this century.

So much for volunteer expenditures for things ordinarily called luxuries and not absolutely necessary.

Education Compared with Government's Receipts.

It is equally interesting to compare the expenditures for education with other governmental receipts and expenditures. Receipts of the Federal Gov-

ernment from customs and internal revenues for 1920 were \$5,730,978,117. This is more than six times the amount expended for education in 1918, and more than one-third the estimated total expenditures for public education and all higher education from the beginning of our history until 1920. It is fully ten times the total of salaries of all teachers in all schools, public and private.

One Fifteenth More Would Double Salaries.

If to the income of the Federal Government be added the taxes collected by States, counties, and municipalities for other purposes than education, the total will be fully fifteen times as much as the total salaries of teachers of all public elementary and secondary schools, normal schools, colleges, universities, and technological and professional schools of all kinds. To double the salaries of all these teachers would require the addition of only \$1 in \$15 to the total of Federal, State, county, and municipal taxes. For every \$15 paid the average taxpayer would pay \$16, and after his receipts were put away he would not know the difference. If nothing were paid teachers from public taxation the average taxpayer would still pay \$14 of the \$15 he now pays, and would not remember the difference after the tax receipts were put away.

The comparisons made above are for the country as a whole. For individual States the comparisons are sometimes even more striking.

In the 50 years from 1870 to 1920 the State of Connecticut paid for public elementary and secondary education \$182,500,000. The amount paid in 1918 was \$10,669,663. In 1920 the people of Connecticut paid into the Federal Treasury in direct taxes the sum of \$106,849,888—ten times as much as they paid for public elementary and secondary education in 1918, and nearly 60 per cent as much as they paid for public elementary and secondary education in the 50 years from 1870 to 1920.

Tax Bill Eight Times School Bill.

Pennsylvania's direct Federal tax bill in 1920 was \$557,008,972, and its bill for elementary and high schools in 1918 was \$69,520,247. The tax bill was eight times as much as the school bill. Pennsylvania's bill for elementary and secondary education for the 50 years from 1870 to 1920 was \$1,191,000,000, only a little more than twice the direct Federal tax bill for one year.

Massachusetts has long held the leadership in public education, but its direct Federal tax bill for 1920 was more than ten times its school bill for 1918 and more than half its school bill for the 50 years from 1870 to 1920.

(Continued on page 10.)

INSTRUCTION IN THE SOCIAL SCIENCES IN PUBLIC SCHOOLS.

Second Annual Report of the Committee of the American Sociological Society on Teaching of Sociology in Elementary and High Schools—Social Problems Too Complex for Grade Pupils.

I. Progress of Social-Science Teaching.

Very encouraging progress is apparent in the teaching of social science. Numerous agencies are promoting the cause. The American Bankers' Association has a committee that is actively furthering the teaching of those phases of economics in which bankers are especially interested. The American Red Cross, through its junior societies, has developed a plan for citizenship training through service. The North Central Association of Secondary Schools has an active committee on social studies. Under its auspices Prof. C. O. Davis, of the University of Michigan, made an elaborate survey of social-science teaching in the 18 States comprised within the association.

His report shows that the schools of those States are "alive to the need for providing for training in citizenship, and that they are employing, possibly as fully as could be expected, all the available means to attain that end"; that "courses of study * * * in citizenship are for the most part deferred to the last two years of school work"; that "courses in elementary sociology, in occupations, and in morals, manners, and life problems are not yet finding any conspicuous place in school programs * * *."

The interest of educators is thoroughly aroused. Social-science teaching is now a very usual subject on the programs of educational associations. Prof. Judd, as secretary of the North Central Association's committee, contended in his report "for a recognition of social studies as the major train or thread of studies, others finding relation to them as possible. * * * Social studies should be magnified at the expense of English, mathematics, languages, and even natural science." The School Review for April, 1920, in which both of these reports appear, is devoted almost entirely to social-science teaching in the public schools, and is now one of the most useful sources of information on the subject. Numerous articles have appeared in other pedagogical periodicals during the year.

Perhaps the most encouraging event of the year was the resolution adopted by the National Education Association committee on social studies at the Cleveland meeting in February. It recommended that a program of social studies, approximately as set forth in our last year's report, be required in all schools. This

resolution is significant not only because of the radical innovation it recommends, but also because of the close affiliation between this committee of the National Education Association and the Federal Bureau of Education, and also because this program represents, as stated last year, the consensus of opinion of all the committees at work on the problem, including that of the American Historical Association, whose program the schools have been following for the past 25 years. Reports have come from widely separated States that this program, or something similar to it, has already been approved by several State educational associations and adopted by some State departments of education.

II. The Program of Social Science Studies.

The program is as follows:

For the elementary school.—Grades I to VI: One full round of elementary general and American history, with emphasis on the economic and social sides.

For the junior high school.—Grades VII and VIII, geography, American history and government; grade IX, general social science, or "community civics."

For the senior high school.—Grade X, European history; grade XI, American history; grade XII, sociology, economics, and civics, or "Problems of Democracy."

While there is general agreement as to the main outlines of this program, there are some details that remain unsettled and with regard to which the sociological point of view ought to be expressed.

III. The Ninth-Grade Course.

This committee has taken some pains to find out what is taught in the ninth grade. Where the course is offered at all, which is unusual, the consensus of opinion and practice among teachers is to put the emphasis upon government. "Community Civics" aptly indicates what is taught. The textbook most frequently used in the ninth grade is Hughes's Community Civics. About three-fifths of this book is devoted to government, one-fifth to economics, and less than one-sixth to sociology. This is fairly typical of what most teachers are trying to do, except that in some schools there is an attempt to add "vocational civics" and vocational guidance.

This concept, usual in the minds of teachers, is much too narrow. Unfor-

tunately the social institution that all but monopolizes their attention is the government. True, they are not content to study its mere forms, as they were some years ago. They do give some attention to the everyday interests of life with which the government concerns itself. But what they teach is still civics, nevertheless—not general social science. Teachers, as a rule, do not yet perceive that government is only one in the sisterhood of social institutions, and not the most important at that; that a "socius" is more than a citizen, having many other social interests, activities, and relations besides the civic.

From your committee's extensive correspondence with sociologists it is quite as clear that they have a much broader concept of what should be taught in the ninth grade. It is the consensus of their opinions that this still too narrow "community civics" should now be definitely abandoned in favor of general social science. The adoption of this name is itself desirable for several reasons, but chiefly to suggest to the rising generation that there is a real science of society. The course should definitely include sociology, economics, civics, and ethics, although it goes without saying that for pedagogical reasons the material should be elementary, concrete, and descriptive, and that the four subjects should be "fused" after the analogy of general science and unified mathematics as they are now taught in the ninth grade of most progressive schools.

The sociology in this course should be chiefly a local study of the fundamental social groups and institutions, namely, the family, the play group, the neighborhood associations, the school, the church, recreation, etc. In the field of economics it should make the pupil familiar with the chief vocations, industries, and industrial institutions of his immediate environment. In the field of civics it should acquaint him with the local civic machinery and teach him how to use it. But while the point of departure in all these fields should be the local environment, the study should not stop there, but should be supplemented with a Nation-wide description of social, economic, and political phenomena, with the relations of local phenomena thereto. And while the study should be chiefly concrete, it should not fail to proceed from the concrete to the abstract in so far as general principles can be assimilated by early adolescents. And throughout the whole the ethical import of sociological, economic, and civic relations should be incidentally but insistently suggested. The course should develop the concept of cooperation, and reveal the *raison d'être* for the essential ideals and virtues of life, while the most

approved pedagogical devices should be utilized for motivating and emotionalizing the same.

While this course is recommended for the ninth grade, that recommendation is based on the assumption of the junior high school organization. Where the eight-four system is still in use it is probably advisable to introduce this course, in part at least, into the eighth grade.

IV. The Tenth-Grade History Course.

In its last year's report this committee stated that the tenth-grade history course should consist of an outline survey of social evolution, including prehistoric times, and it should emphasize the social and economic sides, trace the historic development of ideals and institutions, and reveal the solidarity of modern nations. This position requires repetition with emphasis.

To confine the study of European history to the period since 1648 would be a serious mistake for two reasons. In the first place it would fail to impart the historic perspective necessary to an understanding of our own times. One can no more understand the present crisis in world affairs from a study of recent events only than he can understand a butterfly by watching it emerge from its cocoon. It is as necessary in the one case to get the whole perspective of social evolution as it is in the other to study the whole life history of the insect. A study of our own times alone tends to indorse the obsessions of the times-spirit—from which the times most needs to escape.

In the second place, the study of recent history alone commits the same fallacy as "community civics" does; it exaggerates the relative significance of the political institution. Such an unbalanced study of society would tend to throw society itself out of balance. Sociologists are committed to a philosophy of history and of education which insists "that history must not be taught in a truncated fashion—cutting off the lower three-fourths of it," and the committee has letters from numerous leading educators stating that they are in full accord with this view. This is the philosophy that H. G. Wells hinted at in "Joan and Peter" and expounded in "The Undying Fire," and that has called forth his "Outline of History," which, as the *School Review* suggests, might prove satisfactory as a high-school textbook. The sociologists' position relative to the tenth-grade course in European history was set forth at some length in *The Historical Outlook* for June, 1920.

V. Textbooks.

High-school teachers are as a rule dependent upon textbooks. Good texts are

accordingly of vital importance to the teaching of social science in high schools. It is desirable, therefore, that numerous new texts in sociology should presently appear, so that out of the struggle for existence among them something really suitable may eventually survive. It is almost a foregone conclusion, however, that successful high-school textbooks will not be written by college and university professors of sociology, except in collaboration with high-school teachers who are trained both in sociology and the modern science of education.

The following textbooks are available for use in the twelfth grade. In sociology: Burch and Patterson, *American Social Problems* (Macmillan); Ellwood, *Sociology and Modern Social Problems* (American Book Co.); Towne, *Social Problems* (Macmillan). In economics: Bullock, *Elements of Economics*, 1919 (Silver Burdett); Carlton, *Elementary Economics* (Macmillan); Carver, *Economics*, 1920 (Ginn); Ely and Wicker, *Elementary Economics*, 1919 (Macmillan); Thompson, *Elementary Economics* (Sanborn). Civics: Ashley, *The New Civics* (Macmillan); Dawson, *Self-Government* (Holt); Magruder, *American Government*, 1921 (Allyn and Bacon). New books are constantly appearing.

For general social science in the ninth grade no text is available that compares to the ideals set forth in this report. The Hughes book has been mentioned; Dunn's "Community and the Citizen," 1907 (Heath), was written for this grade.

VI. Universal Secondary Education.

Social-science teaching is not simply a matter of getting the subject into the curriculum but of keeping children in school until sufficient maturity is attained to impart the social principles necessary for effective citizenship. While the movement to introduce social studies and civic training into the elementary grades is, of course, commendable, and in harmony with recent tendencies in the natural sciences, the fact remains that any comprehension of the social sciences adequate to the needs of democracy requires the maturity of high-school age, to say the least.

When it is considered that at best only one-third of our children enter high school, and that only one-ninth graduate, this argument seems conclusive in favor of instruction in elementary schools. But it is not conclusive at all. The really conclusive argument runs as follows: General enlightenment relative to economic and social problems is absolutely necessary to the success of democracy; but social problems are too complex for grade pupils to understand, although they may be taught effectively in the upper grades of the high school; and, therefore,

practically all children must be retained in school throughout the secondary period. High-school graduation is the minimum essential, so far as training for efficient citizenship is concerned; hence compulsory attendance must be advanced to approximately the age of 18.

It is very encouraging that great business interests, like the American Bankers' Association, are coming to realize that for American business as well as for American citizenship the training which only high schools can give is necessary for practically all our young people. Universal secondary education is, therefore, the slogan upon which all intelligent, progressive, patriotic interests should unite. Nothing less is adequate to the needs of democracy in our modern complex society.

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SCHOOL CHILDREN TO BE CARD INDEXED.

Permanent School Census Ordered in Georgia—to Aid Enforcement of Compulsory Attendance Law.

As a step preparatory to a more rigid enforcement of the compulsory school-attendance law, installation of a card-index system in every county in Georgia, in which names of all children between the ages of 8 and 14 years will be listed, was recently directed by M. L. Brittain, State superintendent of schools, in a letter sent to county school superintendents.

The card index will contain the name of each child, age, address, sex, length of time in school, grade, if not in school the reason for absence, name of employer if employed, with the employer's place of business and the kind of employment.

Mr. Brittain says that as the various counties and cities vary in the manner in which the compulsory school attendance laws are enforced, the card-index system will aid in securing a uniform enforcement of the law throughout the State and afford more protection to children of school age.—*School and Home.*

Free tuition to Latin-American students is offered by 55 colleges and universities and 12 normal schools, according to the report of the assistant director of the Pan American Union in charge of the section of education. The value to each student ranges from \$20 to \$350 a year.

"THE SCHOOL THAT TRAINS FOR LIFE."

Mooseheart is the Home of a Thousand Children, Ranging from Babyhood Almost to Manhood—Distinguished Historian is Director of Academic Education—Studies Show His Impress.

"Mooseheart" is a school for children of every age from infancy to 19 years. It is on a tract of a thousand acres on the banks of the Fox River between Batavia and Aurora, Ill., about 35 miles west of Chicago. It is neither public nor endowed nor supported by tuition. It is sustained by contributions from members of the Loyal Order of Moose throughout the United States and Canada. Each member pays in addition to his annual dues \$2 a year for Mooseheart. The result is an annual income of about a million and a quarter dollars for the institution. Dependent orphan children of members of the order who were in good standing at the time of their death are eligible to admission.

Many Religions Are Represented.

Mooseheart has children of members of many religions; Catholic children are cared for by a regularly appointed priest who holds service in the assembly hall. For Protestant children there is a Sunday school and a regular Sunday service.

The school year embraces 48 weeks, arranged in four terms of 12 weeks each, and in the opinion of the officers and teachers, the plan is excellent. It is protected by systematic medical and dental examinations of the children, by the effort taken to relieve children who seem not up to their work physically, and by the exhilarating effect of the sound and healthy open-air life of the institution. Governors and teachers believe that the ordinary American system of from 40 weeks down to 20 weeks of school making up the entire school year is wasteful, both of plant and of children.

So far, none but good effects have been observed of the 48-week plan. The children do more studying and get on faster, yet receive more than the ordinary amount of active exercise and life in the open air, according to "Mooseheart Publication No. 9," which was issued recently.

Graduates to Be Self-Sustaining.

The institution is arranged on a vocational basis; the object of the school is to turn out graduates who shall be capable of taking care of themselves. The division of time between academic and vocational training is almost on the "fifty-fifty" basis; half a day at the desk and half a day at the bench.

The difficulties of carrying on such a system for a great many young people,

who may soon run up into the thousands, is clear to every one acquainted with modern educational problems. It requires large and expensive shop plants, a considerable amount of unusual and intensive instruction, and a portioning out of the time of both boys and girls.

Children Remain through Entire Course.

A characteristic of Mooseheart and at the same time its special glory, is that few of the pupils drop out in the progress of the school. When Mooseheart has arrived at its normal conditions, the school population will not be very different from that of the ordinary small city of 10,000 inhabitants; but the promotions from grade to grade will carry up almost the entire number of each class. Therefore, Mooseheart is obliged to provide for about as many young people in the senior high school as in the junior; while almost all the children in the grades will enter the junior high school.

Mooseheart is arranged on the plan of a modern village. One of the features is a country store carried on for the convenience of the institution; another is a bank in which children may carry accounts and draw checks down to 2 cents, if they have a necessary balance. There is a Mooseheart doctor, a dentist, and nurses; a system of local roads, sewers and electric lights, a lake to swim in and skate on. The property is, by act of the Legislature of Illinois, free from taxation.

History and Civics Emphasized.

Albert Pushnell Hart, professor of government in Harvard University, is director of academic education, and the "Mooseheart Course of Academic Study" clearly shows his impress. It includes the usual school subjects, reading, spelling, mother tongue, writing, geography, arithmetic, nature study, physiology, and hygiene; but it also includes in a measure attempted by few schools, a system of courses on history, and presses strongly on the subject to which is applied the various names of civics, civil government, political science, citizenship, patriotism, Americanism, and government.

The authors declare that the reason for the emphasis laid on these topics is that as "The School that Trains for Life," Mooseheart aims to give special preparation in the experience of the race, and particularly of America. It brings out the important personal relations of

the individual, whether man, woman, or child, to the State of which he is a member. The description and subdivisions of these courses are fuller than in others in the list, because of the special interest of one of the authors in those subjects, and because public attention is now turned to the proper teaching of history and government, particularly in the grades.

Among the unusual elements of this intensive study of history and civics the following may be rated: The second grade course in Colonies; third grade, Indian life and Biography; fourth grade, Discovery and pioneer life; fifth grade, Elements of social and civil organization; sixth grade, Discovery and exploration; sixth grade, Government—elementary underlying principles of American Government; ninth grade (last year of Junior High School), Elements of world history; eighth grade, Government—elements of government; eleventh grade, History, modern history; eleventh grade, Government—business relations; twelfth grade, Government—actual Government of the United States.

"They Stored up Wisdom for Our Time."

The underlying idea throughout these courses is declared to be to bring to the surface the child's latent interest in the world about him. History is taught as a succession of events, purposes, and moral principles, such as are going on nowadays. We are interested in past generations because they stored up wisdom for our time. In government the search is always for the things that really are and actually control affairs, rather than lifeless outward forms of government. The courses on Social, Economic, and Business Relations are given especially to put young people in possession of accurate and group information about problems with which they will have to deal when they grow up to be men and women.

The authors of the Mooseheart course of academic study declare that what is good at Mooseheart ought to be good elsewhere; that Mooseheart is not only an institution and a school, but a laboratory. "It is not a separate island of education; it is a part of the national schools of the United States and Canada."

The department of public instruction of Cuba opened the new enrollment in the School of the Home. Students are required to be over 15 years of age and under 25. The school course lasts nine months, and the girls are taught the management of the home. Of the 30 students who have completed the course successfully, 18 were chosen to take up further studies to fit them to be assistant instructors in the school.

MODERN LANGUAGES IN PUBLIC SCHOOLS.

Study of Modern Languages Should Not Be Restricted to Three or Four Languages.

By DAVID SNEDDEN, Professor of Education, Teachers College, Columbia University.

[Abstract of address before Commission on Reorganization of Secondary Education, Atlantic City.]

Instruction in public-school French, Spanish, and German now costs probably not far from \$10,000,000 annually in the United States. It is a safe estimate that on the average 500,000 students give each at least 350 hours of time and study to these subjects yearly.

What proportion of the thousands of youths who 10 to 30 years ago gave an average of two hours a day for two to four years to French or German, or both, have now any tangible powers or appreciations to show for their outlay?

What proportion ever use a modern language or would have occasion to do so if they could?

Spanish and Japanese are Important.

Is it, or will it probably be, important to our country or to substantial social groups in it, that some Americans should be able to read, write, and speak French up to some "reasonable" standards of precision and fluency?

There is every probability that our relationships with Mexico, Central America, and South America will be extended and intensified in a variety of ways—commercially, diplomatically, culturally. We can consider the prospective situations from the standpoint of international well-being, the successful development of commerce, or helping individual men and women to success.

During the next half century, it is practically certain that our relationship with the Japanese people will develop in a variety of ways. From the standpoint of international harmony and good will, mutual cultural reinforcement and economic cooperation, is it important that Americans should be able to speak, read, and write Japanese?

Many Should Study Each Tongue.

The well-being of society at large as affected by America no less than the well-being of America itself, will require, during the next century that modern language study be encouraged in our schools and colleges. Such study should not be restricted to three or four languages. Each tongue spoken by substantial numbers of men organized into influential nations should be represented.

Follow-up surveys show that hardly 2 per cent of graduates at the age of 30 have any powers or interests in a foreign language or its literature. Appreciations remaining are vestigial. They show that less than 5 per cent of students using modern language for admission to college actually use the subject during, or after, their college years.

Rather superficial two years' courses in Spanish, French, and German are now offered, the Spanish being designed chiefly for the commercial department pupils. One modern language is obligatory for all students. The more ambitious frequently take two, beginning the second one or two years after the first.

In view of prevailing uncertainties as to education value of foreign language study, it seems desirable that discussion of specific issues should be stimulated. Such discussion will eventually lead to research.

NATIONAL CONFERENCE ON THE COMMUNITY CENTER.

Interest in community organization has become so general, its value as a means of bringing together the people for acquaintance, entertainment, mutual instruction and cooperation, and as an indispensable agency for vitalizing citizenship so well recognized, and the desire for consistent practical plans for its successful promotion so great that there seems to be special and urgent need at this time for a nation-wide conference on this subject. The Commissioner of Education is, therefore, with the co-operation of the community organization board, calling a conference on the community center to meet in Washington April 21, 22, and 23.

This conference will bring together the results of experiments in community organization in various parts of the country, particularly in the District of Columbia, where an annual appropriation of \$35,000 is made by the United States Congress for the use of community centers in the schools. From these results and other data definite plans of procedure, sound in principle, flexible in application, and comprehensive in purpose, by which the practical benefits of community center development may be realized throughout the Nation, will be formulated.

Senorita Maria Clotilde Vega has been appointed by the Government of Nicaragua to go to the United States to take an advanced teachers' course. Senorita Vega will remain three years in North America, when she will return to Nicaragua to teach in the normal school.

LEARNING PROCESSES AND SPECIFIC TEACHING.

Measurement of Results, Supplemented by Scientific Analysis, Most Promising Movement for School Improvement.

By CHARLES H. JUDD, Director, School of Education, University of Chicago.

[Abstract of address before Department of Superintendence, Atlantic City.]

The most promising movement looking toward the improvement of classroom teaching is that which naturally follows on the measurement of results, and supplements such measurement by discovering through scientific analysis the points at which teaching can most effectively help pupils. For example, when a pupil is shown to be deficient in some one phase of arithmetic, analysis should be undertaken to find the exact cause of the deficiency, and teaching should be focused on the correction of the difficulty.

Another example can be found in certain recent studies of the results of teaching Latin. These studies show that the third year's work is for most pupils wholly unproductive. Here, again, analysis should uncover the bad habits of learning which lead to stagnation.

A further illuminating example of analysis is that which is supplied by investigations of reading. The distinction between oral reading and silent reading and the reforms which have been effected in the elementary program as a result of this distinction are among the most significant contributions of science to modern education. The distinction in question resulted from laboratory studies and its importance has been confirmed by practical experience, especially in the upper grades where great benefits have followed the curtailment of oral reading.

These examples of useful analysis should encourage school officers to devote more energy in all lines to scientific analysis which will furnish valid grounds for better directed, specific teaching.

The administrative commission of the Paraguayan Institute has approved a plan for physical culture in that institution and other schools. The students of the institute are to be taught wrestling and fencing; gymnastics will be given by a corps of professors in the schools and colleges of the Republic; the instruction of the greatest number of inhabitants possible in physical exercises will be encouraged by local championships, national and international games, and by propaganda in favor of physical development through lectures, sporting publications, etc.

JUNIOR COLLEGE MEETS DEFINITE NEEDS.

Report of National Conference Committee on College Standards Ascribes Functions and Describes Field.

The junior college is an institution covering the first two years of a standard college course, based upon the completion of four years of high-school work. It may be a division of a large university offering a full college course but for administrative reasons dividing that course into two separate units, each covering two years of work; it may be a separate institution, either rural or urban, under private or public control, established primarily either to meet local needs for post-high-school work, whether vocational or cultural, or to allow students to take the early years of their college course near their homes or in a comparatively small and closely supervised environment; it may be a graduate annex to a local high school organized primarily to gratify local pride or to aggrandize the local school system.

Movement for Establishment Is General.

There are more than a hundred such institutions in the country, and there is a marked tendency to increase the number. The institution has had its greatest development in the West and South, but it exists in all parts of the country, and the movement is general rather than local or regional.

In many cases the junior college meets a genuine need. It serves in a measure to relieve the enormous pressure of students on many of our universities, and by relieving that pressure helps to solve the troublesome problem of the assimilation of the freshman. It lightens the financial burden for many students by allowing them to take the first half of their college course at less expense than in a distant institution. For many it affords the opportunity at home and at small cost to pursue vocational or pre-professional studies that otherwise they would be unable to afford.

Since it thus meets definite needs, it is evidently here to stay, and the problem is not whether we shall have junior colleges but how far they shall be encouraged, what standards shall be insisted on, and how far work done in them shall be accredited by standard colleges, by professional schools, and by universities.

Must Conform to College Standards.

It may be set down as a safe working principle that junior colleges should be encouraged in so far as they meet genuine legitimate needs, and that their work

should be accepted and accredited in so far as it conforms to the standards maintained by colleges and universities of recognized standing. This means that the institution must possess at least the minimum collegiate equipment, that the teachers must be of collegiate caliber, men and women of scholarly attainment, that the work must be done under college conditions, and that the atmosphere must be distinctly collegiate rather than secondary in character. In other words, the work done in junior colleges must be recognized at its face value just as far as, and no farther than, it conforms to the standards of recognized institutions.

The junior college as a division of a large university may be an administrative device of great value, but the institution in this form is something with which we are not particularly concerned at present.

The rural junior college may serve a very useful purpose, and it would undoubtedly be for the best interests of this country if many of the small institutions with weak resources, which are vainly struggling to maintain themselves as second and third rate colleges, would frankly recognize the situation, give up the struggle, limit their field, and make themselves into first-rate junior colleges, sending their students on to earn their degrees in standard institutions.

Cities Should Maintain Junior Colleges.

Some of our cities maintain strong and well-equipped municipal colleges and even universities, and there is no reason why, if a local need exists, a larger number should not maintain junior colleges. It must be emphatically asserted, however, that if such an institution is to claim collegiate standing and collegiate recognition, it must maintain collegiate standards. It must ordinarily be a separate institution, with its own building, its own president, and its own faculty. It must possess adequate library and laboratory facilities for work of college grade. Its faculty must have higher scholarly attainments than the minimum necessary for successful high-school work, and a reasonable proportion of the staff should have had experience in college teaching. The number of teaching hours required of them must be smaller than are ordinarily called for in high schools, in order that they may have opportunity for proper study and preparation. The method of instruction should be collegiate rather

than secondary, and the atmosphere should be the same.

The extension of a high-school course by the addition of one or two years of more advanced work may meet a genuine local need, but such an annex to a high school is not necessarily worthy of collegiate standing. In general it may be said that such an institution with the high-school principal becoming the president of the college, with certain of the high-school teachers taking over the work of instruction, and carrying it on with the high-school facilities, does not deserve to be called a college and should not be recognized as such.

GRANTS TO BRITISH UNIVERSITY INSTITUTIONS.

Treasury Aid for 1920-21 Amounts to £863,500—Special Grants Due to War's Results.

Annual block grants are given by the British Treasury for the general purposes of the university institutions of Great Britain and Ireland. Those institutions also receive from the board of education grants for the training of teachers and for technical work somewhat below the university plane. They receive also from the Ministry of Agriculture grants for agricultural work. Moreover, the board of education makes grants to ex-service students, but they are not grants-in-aid to the universities.

The Treasury grants for the academic year 1920-21 amounted to £515,000 for English institutions; £57,500 for those of Wales; £180,000 for those of Scotland; and £111,000 for those of Ireland.

Nonrecurrent special grants were given in 1919-20 in order that the institutions might, as far as possible, resume their full work, notwithstanding the extraordinary expenditures caused by the prolonged interruption of their activities and development caused by the war.

The special grants for 1919-20 were £305,500 for English, £105,500 for Scotland, £9,000 for Irish, and £22,000 for Welsh university institutions.

The universities of Oxford and Cambridge and Trinity College, Dublin, are not considered on the same basis as other university institutions, but during the past year Oxford and Cambridge received £60,000 each and Trinity College received £24,000 to help them in their financial difficulties of the moment. The question of permanent annual grants for those institutions is now under consideration by royal commissions.

SCHOOL LIFE

Issued by the Department of the Interior,
Bureau of Education.

Editor, JAMES C. BOYKIN.

TERMS.—Subscription, 50 cents per year, In advance. Foreign (not including Canada, Mexico, Cuba), 75 cents. Copies are mailed regularly, without cost, to presidents of universities and colleges, State, city, and county superintendents, principals of normal schools and of high schools, and a few other administrative school officers.

Remittance should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C., and should be by cash or money order. Stamps are not accepted.

APRIL 1, 1921.

RELATIVE DECREASE IN UNIVERSITY APPROPRIATIONS.

The University of Illinois has asked for an appropriation from the State of \$10,500,000 for the next two years. In a statement explaining the budget submitted to the legislature, President David Kinley says that the university's percentage share in the State appropriations is only half what it was 10 years ago.

While the university's need has been growing with other needs of the State, they have been met by a decreasing share of the State's income. The total State appropriation has increased 108 per cent since 1911, while that to the university has increased 10 per cent in the same period.

The grand total of taxes levied for all purposes in Illinois in 1915 was \$124,813,482. Out of each dollar the university received 2.01 cents. In 1919 the total sum of taxes levied was \$190,581,361. Out of every dollar the university received a cent and a half.

NEW YORK SCHOOLS IN CIVIC FESTIVAL.

A civic festival, "America's Making," will be held in New York City next October, and the schools of the city will take an active part. The celebration in the schools will be from October 1 to 14, and it will be followed by pageants and exhibits in the Seventy-first Regiment Armory.

The festival is the joint work of societies, schools, libraries, museums, and citizens. At the armory, contributions to American life will be grouped according to the lineage of the citizenry of the Nation.

Dr. William T. Ettinger, superintendent of schools, has issued to all members of the supervising and teaching staff of New York a general circular giving complete details as to the participation of the schools in the festival. He emphasizes

the study of what American civilization comprises, and what races were chiefly responsible for each element in the National life.

On May 1 each school will be asked to report to its district superintendents what contributions to American national life the pupils and teachers have ascertained to have been made by each racial group. In the report asked for, the authority or source of information for each statement is to be quoted as to book, page, and author.

PLANS FOR HOUSING WELLESLEY'S FACULTY.

Suitable houses for members of the faculty of Wellesley College will be constructed, if the campaign now in progress for additional funds is successful. Some members of the faculty have houses of their own and many live in the college dormitories. A large number are not housed in this way, however, and some of those living in the college halls of residence find the constant contact with undergraduate life distracting to research and individual interests.

The need of housing its faculty was met with success some years ago by Mount Holyoke College by the erection of an apartment house. Vassar College has made similar plans.

Two connecting quadrangles are proposed, one of which will consist of a faculty alumnae clubhouse and two apartment houses of 12 apartments each; the other will have three single houses and two double houses. The buildings will have steep roofs and simple wall surfaces, adapted with all possible freedom of design to the climate of New England, and to the setting of trees and shrubbery which the Wellesley campus offers.

EXTRA-INSTITUTIONAL SUPERVISION OF FEEBLE-MINDED.

Special educational facilities for the feeble-minded while such persons are of school age or while they are developing in body and mind, and supervision by the community of all feeble-minded persons after they cease developing, are urged in a report of the Missouri Mental Deficiency Survey published by the State board of charities and corrections in Missouri. The survey was made at the request of Frederick D. Gardner, governor of Missouri, and under the auspices of the National Committee for Mental Hygiene and the Missouri Commission on Mental Deficiency.

A State agency should be charged with making and maintaining a census of per-

sons who have been discovered during their school life to be weak in intelligence, says the report, and this agency, by a plan for frequent visiting by welfare agents, should be charged with the extra-institutional supervision of these cases. An indispensable aid to the operation of such a State supervisory agent of the feeble-minded, the report continues, is a traveling clinic to be at the service of schools and courts in small cities and rural districts.

FIELD WORK IN HEALTH EDUCATION.

A field worker, Miss Martha Dinwiddie, is employed by the Bureau of Education to stimulate interest in health education. Upon request Miss Dinwiddie visits schools in villages and rural communities, and delivers informal talks at meetings of teachers, women's clubs, and the like. Necessarily her itinerary is planned very carefully to avoid "long jumps" and to utilize her time to the best advantage.

ADDITIONAL INCOME ASKED FOR COLORADO INSTITUTIONS.

By a vote of 160,269 against 51,824, a constitutional amendment was adopted in Colorado in November which gave the legislature authority to levy an additional tax of 1 mill on each dollar of valuation for the higher educational institutions of the State. Those institutions are now asking the present legislature for an additional tax of a half mill only.

The proceeds of such a tax would be thus divided:

	Yield of present tax.	Expected yield of half-mill tax.
University of Colorado.....	\$419,468.63	\$257,473.47
Colorado Agricultural College.....	210,848.23	129,273.26
Colorado Experiment Station.....	66,831.91	41,055.72
Fort Lewis School of Agriculture.....	31,507.89	20,334.38
School of Mines.....	139,168.95	79,883.61
State Teachers' College.....	210,848.23	129,273.21
State Normal School.....	78,769.72	48,296.17
School for the Deaf and Blind.....	147,991.59	70,863.63

YALE INCREASES MEDICAL SCHOOL REQUIREMENTS.

Yale University has increased the admission requirements of its medical school. Beginning in 1922, three years of collegiate work or its equivalent, instead of the present two years, will be required of all candidates for admission to the school of medicine. The tuition fee in the medical school beginning with the next university year, will be increased from \$240 to \$300.

"COUNCILS" OF PUBLIC SCHOOL TEACHERS.

Intermediaries Between School Boards and the Teachers—Idea First Applied in Waterbury, Conn.

By BERTHA Y. HEBB.

Teachers' councils had their beginning in Waterbury, Conn., in 1908. At first the number increased slowly, and only 34 were organized to the end of 1918. In 1919 and 1920, however, the movement took on new impetus and the number was more than doubled. All told, 86 cities now have such organizations in their school systems, 15 others are ready to organize, and 45 more have advisory bodies of teachers in some form.

In 38 cities the councils came into being upon the suggestion of the superintendent of schools, in 4 upon the suggestion of the school board, in 22 upon the initiative of the teachers themselves, and in 12 through the united efforts of the superintendents and the teachers. In the remaining 5 cities the origin seems to be uncertain.

Teachers' councils are generally constituted for some or all of the following purposes: (1) To raise the standard of the teaching profession; (2) to encourage professional improvement; (3) to foster a spirit of sympathetic good will and helpfulness among teachers and a better understanding between teachers and officials; and (4) to democratize the school systems; that is, to give teachers a voice in shaping educational policies.

Work Generally Considered Beneficial.

School superintendents generally state that the work of teachers' councils has been beneficial. Among their specific achievements the following are reported: (1) Aided in securing a retirement law; (2) conducted successful campaign for school bonds; (3) formed loan fund for teachers; (4) procured general increase in salaries; (5) worked out a new course of study; (6) unified teachers by social gatherings; (7) held meetings for professional advancement; (8) conducted lecture courses; (9) secured use of school buildings for community purposes; (10) established cooperation between schools and private music teachers; (11) brought about better working conditions for teachers; (12) provided rest rooms for teachers; (13) organized parent-teacher associations; (14) equipped playgrounds.

Only one of the teachers' councils organized so far has been discontinued. This council, the superintendent says, was formed at his suggestion and was maintained for two years. Little interest

was manifested in it and many of the teachers regarded attendance as an additional burden. At the end of the two years at a meeting of all the members, the superintendent put the question to a vote as to whether the council should be continued. The sentiment was overwhelmingly in favor of dropping it.

In the following cities teachers' councils are in operation, according to reports recently received by the Bureau of Education:

California.—Fresno, Los Angeles, Pasadena, Redlands, Sacramento, San Francisco, San Jose, Santa Barbara, Vallejo.

Connecticut.—Manchester, New Britain, New Haven, Norwalk, Waterbury.

Illinois.—Alton, Aurora, East Chicago, Oak Park, Rockford, Streator.

Indiana.—Fort Wayne, Gary, Terre Haute.

Iowa.—Fort Dodge.

Kansas.—Coffeyville, Hutchinson, Kansas City, Leavenworth, Pittsburg, Wichita.

Kentucky.—Lexington, Louisville, Paducah.

Massachusetts.—Boston, Framingham, Lawrence, Methuen, North Adams, Webster.

Michigan.—Alpena, Battle Creek, Escanaba, Ironwood.

Minnesota.—Duluth, Minneapolis, St. Paul, Virginia.

Missouri.—Kansas City, Sedalia.

Montana.—Billings.

Nebraska.—Lincoln.

New Hampshire.—Dover, Manchester.

New Jersey.—Kearny, Newark, North Bergen, Orange.

New York.—Binghamton, Cortland, Dunkirk, Jamestown, Kingston, New York, White Plains.

Ohio.—Cincinnati, Chillicothe, Cleveland, Lorain, Marion, Springfield, Toledo.

Oklahoma.—Muscowee, Tulsa.

Oregon.—Portland.

Pennsylvania.—Reading, West Chester.

Texas.—Cleburne, Denison, El Paso, Houston.

Utah.—Salt Lake City.

Virginia.—Roanoke.

Wisconsin.—Janesville, Milwaukee, Superior.

Three public libraries were opened in the Virgin Islands recently—one at Charlotte Amalia, St. Thomas; one at Frederiksted; and one at Christiansted, St. Croix. They were financed by the Junior Red Cross of America, which appropriated \$10,000 to the project. The American Public Library Association cooperated with the Red Cross in securing two librarians and in purchasing supplies. The United States Navy sent gifts of books and local communities provided suitable quarters.

NORMAL SCHOOLS AND HEALTH EDUCATION.

Good Health an Indispensable Part of Teachers' Equipment—Training in Elements of Hygiene.

"Health training for teachers," a leaflet prepared by the Child Health Organization of America and published by the Bureau of Education, sets forth the rôle which normal and training schools should play in the advancement of health education.

As an aid in organizing the work of a normal department of hygiene definite suggestions are offered, among which are the following:

Normal students, future teachers, should at the very beginning of their course become convinced of the value to themselves of good health in relation to success and happiness.

Students should be brought to see that good health is an indispensable part of the teachers' special equipment.

Students should become possessed of the best modern ideals of healthy living and develop a steadfast loyalty to these ideals.

The students should at the outset be led definitely to form good health habits, to recognize good and poor physical tone in themselves, and be aided in every way to reach and to keep perfect physical condition.

They should become enthusiastically "outdoor-minded."

They should become convinced of the supreme value of good health for school children and of the urgent need of improving the health teaching in our schools.

The normal teacher should acquaint students with the immensely interesting and richly fruitful health movements of to-day and enlist them wholeheartedly in the cause of better health for America and the world.

Students should become acquainted in a practical way with the best methods and devices for training in healthy living.

The students should be trained in the elements of school hygiene, and as far as possible be fitted to cooperate with the school medical inspector and school nurse.

The normal school should be expected and enabled to help teachers in service in the State to do good health teaching.

The leaflet is listed as Health Education No. 8, and may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 5 cents a copy.

South Dakota appropriates \$10,000 a year to be used as State aid for the erection of teachers' cottages.

ADDITIONAL TRAINING FOR NEW TEACHERS.

First Year is Spent in Selected Schools Under Close Supervision—College Credit Granted.

Six "training centers" are maintained by the board of education of Buffalo, N. Y., for the benefit of young teachers during their first year of service. New appointees are assigned to teach the classes in these six schools under the close supervision of the principals and a corps of experienced teachers selected because of their exceptional ability and personal qualifications, writes C. P. Alvord, deputy superintendent of schools, in *The School Magazine*.

Not only do the newly appointed teachers get the benefit of extra training of an intensely practical character during this first year of actual service, but in addition they have an opportunity to study at a university and work for a degree. The two years of normal work are now accepted at par toward a B. S. degree in both the University of Buffalo and Canisius College. Also 12 university hours of credit may be secured for successful teaching done in the first three years of work in the Buffalo schools.

It is no reflection on the kind of training given at the normal and other schools of training to say that their work needs supplementing, particularly during the first year, when the new teacher is given full responsibility for the teaching of a class of children, when she is forming her teaching habits, when her professional attitude is being determined, when her way of managing children, her methods of discipline, are being developed. This first year is most critical. It is the time when she needs the encouragement, the inspiration, and the guidance such as can only be given by some such plan as this."

ROTATION PLAN TRIED IN UTAH SCHOOLS.

Four consolidated districts of a purely rural type, all off the railroad, are this year experimenting with vitalized education under the so-called rotation plan, as now used in the State of Missouri and sponsored largely by Perry G. Holden. In two of the districts all the teachers were gathered into a local summer school conducted last year as a branch by the University of Utah. This school was devoted largely to instruction in vitalized education under two capable teachers from Nodaway County, Missouri. So far reports from the four districts are very encouraging.—*J. B. Ball*.

COST OF EDUCATION IN THE UNITED STATES.

(Continued from page 2.)

New York State and city have boasted in recent years of very large appropriations for education, but New York's direct Federal tax bill of \$1,418,332,651 in 1920 was more than twenty times as much as its school bill for 1918 and only \$145,000,000 less than its school bill for the 50 years from 1870 to 1920.

Delaware's direct Federal tax bill for 1920 was almost exactly the same as its school bill for the 100 years from 1820 to 1920.

Virginia's direct Federal tax bill of \$69,751,127 in 1920 was more than eight times its school bill for 1918 and was 47 per cent of its public school bill for the 98 years from 1822 to 1920. This includes appropriations for higher education, for normal schools, and schools for the deaf, dumb, and blind.

Maryland's direct tax bill of \$81,452,867 in 1920 was 13 times its education bill for 1918 and more than half its school bill for the 95 years from 1825 to 1920.

North Carolina's direct Federal tax bill of \$162,667,320 in 1920 was several million dollars more than its total expenditures for education, higher and lower, public and private, for the 250 years of its existence as Colony and State.

To the direct Federal tax bills of the several States for 1920 as given here should be added their proportionate parts of the total of customs taxes of \$323,000,000.

Expense for Education Almost Negligible.

These comparisons may be tedious but they are instructive. These and other figures which might be easily determined show very clearly the contention in the first part of this article, that, compared with other expenditures, public and private, expenditures for education are almost negligible.

We think we believe in education. We talk much about it, and many of us have believed that we pay much for it; that it in fact constitutes a very great burden, if, indeed, it is not our chief burden. No doubt we do believe in education in a way, but we have not paid and do not pay much for it. If this statement helps to dispel this illusion and to give some accurate information as to actual expenditures for education as compared with other expenditures it will serve its purpose.

Four traveling schools have been organized in Colombia to teach the country dwellers to read and write. These schools will also conduct an active antialcoholic campaign.

A SUCCESSFUL NATURE-STUDY LABORATORY.

Typical American School Garden Plays Its Part in Training for Useful Citizenship.

By MAURICE A. BIGELOW, *Director School of Practical Arts, Teachers' College, New York.*

[Abstract of address before School Garden Association of America, Atlantic City.]

Children's gardens are not intended primarily to produce useful plants, nor to train professional gardeners, but to use the scientific methods of gardening as a very practical basis for important phases of cultural and useful education. The great children's garden movement, guided along such lines, is destined to play well its part in our national readjustments and reconstruction in the ways and means of making children into citizens fit for an ideal democracy.

It seems to me that the leading American school gardens have always been of general educational value along nature-study lines. They have made the children interested in useful plants; they have led to aesthetic appreciation of plants; they have given a glimpse of the relation of plants to human life; they have given training in observing nature for the joy of learning facts. In short, the typical American garden has been a most successful nature-study laboratory.

I believe that we have learned from experience that the garden for children is to be regarded primarily as an educational apparatus, just as books and maps and blackboards and science laboratories are materials for use in instruction. As I look over the educational good that has come irregularly and uncertainly from the children's garden of the past, I have a vision of gardens of the reconstructed or readjusted future which will give constant and certain contributions to the making of good citizens.

NEARLY 300 AMERICANS IN BRITISH UNIVERSITIES.

A considerable increase in the number of American students attending British universities is reported. It is stated that there are 180 Americans at Oxford, 60 at London University, 37 at Cambridge, 21 at Edinburgh, and others at the smaller universities. It is expected that the next term will bring a big increase in the number of American students. Thirty American Rhodes scholars are due at Oxford early in 1921.

SCHOOL BUILDING SHORTAGE IN THE UNITED STATES

Additional Accommodations Apparently Needed for 1,569,500 Children—Cost Would Be Approximately Six Times Annual Expenditure for Schoolhouses Before 1917.

By J. F. ABEL.

More than half a million additional sittings must be furnished during the school year 1920-21 if there is to be ample provision made for all the school children in the schools of fewer than one-third the towns and cities of the United States. To be more nearly exact, 859, or 66.2 per cent of the towns and cities, with a population of 2,500 and over, that reported claim to lack adequate school facilities, and say that they must add to their present school plants accommodations for 507,524 children. They estimate the cost of doing so at about \$300,000,000.

These are figures obtained from responses to a questionnaire sent early in the current school year to superintendents of town and city schools. Twelve hundred and eighty-seven replies were received from 2,831 towns and cities with a population of 2,500 and over.

The urban population of the United States is 51.4 per cent of the total. The 1,287 cities that reported on their school building conditions represent a population of 34,402,000—that is, 63.3 per cent of the urban population of this country, or 32.5 per cent of the total.

Need More and Better Buildings.

The need is not confined to any one section of the country nor to any special class of cities. In proportion to adult population it has expressed itself in the greatest numbers in the Middle Atlantic States. The States of the old Northwest Territory have the second largest figure, and New England the third. The figures for the Middle West, the South, and the West are the lowest and are approximately the same for the three sections. But cities and towns of all sizes and in every State report that their school plants must be increased in size and made better in type. In the largest cities lack of accommodations are indicated for numbers of children ranging from 6,000 through 20,000, 21,000, and 24,000 to a maximum of 84,000 for a single city. Small towns report needs of 50 to 200 and smaller cities 500 to 4,000 and 5,000 each.

Many Reasons for Shortage.

There are several reasons for the school building shortage. Public building except as it pertained to military operations was largely stopped during the

war. The Capital Issues Committee provided for in the war finance corporation act passed upon the sale of public securities. Requests for advice on the issuance of school bonds were referred by that committee to the Bureau of Education. From February, 1919, to January, 1920, the bureau received requests for permission to issue bonds in amounts aggregating \$20,000,000. It recommended the issuance of approximately \$11,000,000. In the school year 1917-18 the United States expended for additional school facilities \$119,082,904. The comparatively small amount of the total of requests for permission to issue bonds in 1919 indicates that in the school years 1918-19 and 1919-20 only a small part of the school building was done that was necessary to take care of the number of children that were added to the attendance in those two years and to provide for more diversified courses and for deterioration of buildings.

High Costs Prevented Construction.

After the armistice was signed the high cost of materials and labor and the difficulty of disposing of bonds that bore moderate rates of interest kept many boards of education from undertaking even urgent building programs. Seventeen cities report \$10,000,000 in bonds ready to be issued and sold as soon as conditions are more favorable. Such statements as the following are frequently found in the returns:

"We had \$185,000 this year for new construction, but did not expend any of it because building prices were practically prohibitive."

"One million dollars for new junior high school voted May, 1920. Rate of interest at present prohibitive."

New Types are Demanded.

The spread of the junior high school and junior college ideas has created a demand for buildings especially adapted for such work. High schools, junior and senior, township, community, commercial, and vocational are specifically mentioned more than any other type of schools. The estimated cost is usually \$400,000 to \$500,000 for a single building. The tendency seems to be to relieve congestion in the grades by building new high school buildings and using the space formerly

devoted to the high school for grade purposes.

Deterioration Rapid in Old Buildings.

Better standards of school housing, deterioration of buildings, more varied courses of study, dissatisfaction with older types of buildings, shifts in population, the enforcement of compulsory education laws, and limited bonding capacity have all added their share in the expression of need for additional school facilities. A Massachusetts city reports that there is no actual need of additional sittings but a general need for new buildings "as in many New England towns." From a town in the Middle West comes the report:

"We have room enough for the children we have with the course of study we have. To add commercial courses, increase the work in agriculture, manual training, domestic science, and kindergartens, etc., would take more room." A city of 55,000 population is in need of 7,000 sittings to take children out of cottages, portables, halls, insanitary basements, and to relieve large classes. From a southern city comes the statement, "We need 2,000 sittings to cost \$100,000. Our compulsory school law makes this necessary. As a result, we are not enforcing the law." Another city that needs sittings for 24,000 children at an estimated cost of \$9,000,000 is limited to an 8-mill tax and has to go to the State legislature for relief.

Provision for Three-fourths of Need.

What the school officers feel that they need is indicative of their ideals. How they are going about it to meet the need is indicative of their growth and strength. In this year of high prices and high interest rates, not quite half, 386, of the 859 cities that reported insufficient school plants, are spending \$135,600,000 to provide 322,003 sittings. Those figures indicate that 63.6 per cent of the needed sittings are being built and at 45 per cent of the estimated cost. Eighty-five cities have appropriations and bonds to the amount of \$80,708,000, for whose expenditure no contracts have been let. If this be added to the money being expended it will be seen that 72 per cent, nearly three-fourths, of the rather liberal sum of 300 millions estimated to provide the

necessary 507,524 sittings is available for the year.

A fairly active building program is being carried out in many places. In others there is the expressed intention of providing not merely a sufficient number of sittings but modern, fireproof buildings adequate to take care of several years of attendance growth. A city of 65,000 on the Pacific coast reports, "There are now 80 portable buildings in use. These will be abandoned as soon as the projected building program is completed. The city has recently voted bonds in the amount of \$3,064,000 for this purpose. None of these buildings are as yet under construction though plans have been under consideration for some months."

Replacing Frame Buildings with Brick.

A Middle West city of similar size is replacing frame buildings with brick and adding new buildings to the extent of a million dollars. In New England a city in the same class is planning new buildings more along the line of general improvement than because of any shortage. Of two cities, each of which has over 100,000 population, one is spending six millions for senior and junior high schools and elementary buildings. The other is now constructing two buildings that will eliminate all part-time classes. The cost of complete equipment for this second city is estimated at \$5,000,000.

Three hundred twenty-five or one-fourth of the cities that responded to the questionnaire, claim to have adequate school buildings and equipment for present needs. The tone of the replies indicates that these reports do not come from ignorance of what is best in educational equipment. Of two cities in Michigan, one says tersely, "We are just finishing and opening what we need at present. This city does not allow its building program to lag;" the other declares that in about six weeks the children will be better housed than they have been in the past 10 years. One very large city has discontinued all half-day sessions and reports its building situation satisfactory. A Kansas town of 12,000 inhabitants has present appropriations that the superintendent of schools believes will make conditions nearly ideal for several years.

Some Cities Have a Surplus.

Surplus school facilities are shown in 29 reports. Shifts in population away from mining towns and industrial cities that were congested for war production are to some extent responsible for this. In a few places buildings have just been completed and there is a surplus of a few rooms but this surplus is so small as to be almost negligible in comparison with

the total number of sittings required or of those that are being built.

Need is Greater in Small Cities.

In the general expression of need for better school housing, it is somewhat interesting to segregate from the complete returns those that came from cities of 25,000 and over.

There are 288 such cities in the United States, and they represent over 80 per cent of the urban population. Two hundred and four of them reported. Their population numbers 26,374,500, or 76.6 per cent of the population represented by the entire number of cities reporting. This 76.6 per cent has expressed 65.8 per cent of the shortage of school facilities and estimated 74.5 per cent of the cost of meeting that shortage. It is expending 68 per cent of the money that is reported as being invested in new buildings, and expects to furnish 60 per cent of the total number of sittings for which the entire investment is being made. Moreover, this 76.6 per cent has 80 per cent of the money in bonds and appropriations that is available for building purposes, and that will be expended when conditions are more favorable. While the most aggravated cases of inadequate housing are in some of the large cities, the general building need seems to be proportionally greater in the smaller ones.

To summarize:

- Replies received from 1,287 cities representing 63.3 per cent of the urban population and 32.5 per cent of the total population of the United States express a need for 507,524 additional sittings if ample provision is to be made for all the school children of those cities, and estimate the cost of furnishing those sittings at \$299,304,190.

Moving to Remedy Deficiencies.

- Approximately one-half the cities reported to have inadequate school plants are building to meet the need and are expending \$135,600,000 to provide 322,093 sittings.

- One-fourth of the cities that responded to the questionnaire claim adequate school facilities. Twenty-nine cities claim a surplus.

- The general building need seems to be proportionally greater in the smaller cities than in the larger ones.

- If cities not reporting at all need sittings in the same proportion to population as those reporting, and at approximately the same cost per sitting, then the total number of sittings needed in the cities is 805,000, at a cost of \$473,000,000.

- If the need for sittings in rural communities, including places up to 2,500 inhabitants, is in the same ratio but at 60 per cent the average cost per sitting

SCHOOL RESTAURANTS FEED 16,000 DAILY.

Cleveland Board of Education Maintains 22 Lunch Rooms—No Overhead Charges.

School lunches on a large scale are conducted by the board of education of Cleveland, Ohio. At every junior and senior high school and in a few other buildings—a total of 22—there is a restaurant that caters to the pupils. According to a statement in School Topics, 16,000 patrons a day, five days a week, and 38 weeks a year, eat at these restaurants, consuming a third of a million dollars' worth of food annually. It is the biggest chain of restaurants in Cleveland.

What is most interesting is how these school lunch rooms differ from the commercial variety, says School Topics. Most of the patrons get all they want to eat for 20 to 25 cents; 50 cents for a meal would be an orgy of extravagance. Where can you eat down town for 50 cents, not to dream of 20 or 25 cents?

Patrons of the school lunch rooms are not helping to pay rentals nor to pile up profits. The school lunch rooms have no overhead charges beyond actual wholesale cost of food, price of necessary labor, and a small fund to cover breakage.

Each school lunch room is in charge of a manager employed by the board of education. Most of the managers are experienced domestic science teachers, and some of them give half time to teaching.

In most of the schools the lunch room gives pupils in cooking an opportunity to prepare salads, desserts, and other dishes, but in no school is educational value of the pupils' work sacrificed. Enough paid cooks and workers are employed to give adequate service without the aid of the pupils.

in the cities, then the rural communities need 764,500 sittings, at a cost of \$253,800,000.

7. The total number of sittings needed would thus appear to be 1,569,500, and the cost of providing them \$726,800,000.

This is approximately six times the average amount paid for public-school buildings in the years before the war.

The corner stone of the National University building has just been laid in San Salvador with appropriate ceremonies, the President of the Republic, the cabinet officers, and the diplomatic corps being in attendance.

THE TRAINING OF RURAL TEACHERS.

By EDITH A. LATHROP.

A hundred thousand new teachers are employed every year for the rural and village schools of the United States. One-third of them have no professional training whatever; one-third receive their training in short-term summer courses; one-third are trained in the high schools, county normal schools, and State normal schools.

Normal School Graduates about 33,000.

The latest statistics of graduates from normal training courses in county normal schools and high schools are based on a study made by the Bureau of Education in 1917. In that year there were 16,626 graduates. A canvass at the present time would probably show considerable increase in that number, for the number of States which subsidize teacher training in summer schools has increased from 21 to 25, and the high-school enrollment has greatly increased since 1917. It is likely that the percentage of normal and high schools is not equal to the percentage of increase in high-school enrollment, for young people have not selected teacher-training courses during the past few years as much as before. Approximately 7,000 students were graduated from the rural departments of the State normal schools in 1918; 16,626 and 7,000 make 23,626. These figures are three and four years old, and it is safe to assume that by this time the number of graduates from State and county normal schools and teacher-training departments in high schools is approximately 33,000. This is the third of the entire 100,000 teachers employed each year for the rural and village schools. Those trained in colleges and universities are negligible, numerically.

High School Training is Popular.

Normal training in high schools has greatly increased in favor since its beginning in the academies of New York State in 1834. Its popularity is due in a large measure to the fact that it is provincial. It is cheaper to meet the requirements of certification in a local high school than it is to go away to a normal school. Normal training courses increase the high-school enrollment by attracting country girls who are planning to teach. These girls usually teach a few years in the communities from which they come.

As early as possible the number of high schools which offer teacher training

should be limited, but the change must be made gradually, for the provincial aspect of this work of the high schools will make it difficult to displace them. The first step, however, should be made without delay, and the year of teacher training should be made a postgraduate course. Close affiliation should be established between the rural departments of the State normal schools and the teacher-training high schools.

The training of rural teachers is the proper function of the normal schools, but the majority of the normal schools are not giving serious consideration to rural teachers. They can not turn out teachers fast enough for the cities.

Few Normal Graduates in Rural Schools.

A normal-school president from a Middle West State said at the council of normal-school presidents held in Washington recently, "Not a graduate from a two-year course in my school has entered a rural school for the past five years." He asked for exceptions; there was no response. The fact is that just so long as rural schools accept teachers with less preparation than do city schools just so long will normal schools be unable to compete with high schools in teacher training.

As fast as the required qualifications of rural teachers can be raised the normal schools should relieve the high schools of teacher training. High schools can never do the work as well as normal schools. The money spent on teacher training in high schools would better be expended in building up strong rural departments in the normal schools.

The rural training department of a normal school should admit only such students as have completed a four-year high-school course or its equivalent. It should command the best of faculty support, it should provide for practice teaching in rural districts, and it should offer a course of study which emphasizes country life.

Equality of Opportunity Not Realized.

The public-school system in this country is a monument dedicated to the proposition that the stability of a republican form of government depends upon the intelligence of its people; but so long as the children of the rural districts are taught by teachers with training and experience inferior to those of the city districts we shall have a long way to go in the realization of equality of opportunity for all the children in the Republic.

Trained and efficient teachers for the rural schools can be supplied as soon as the country accepts the fact that rural teachers must be as well prepared as city teachers. When that time comes it will be possible to procure legislative enactments that will insure strong rural departments for the training of teachers in the normal schools of the country.

COST OF RETARDATION TO A SINGLE STATE.

An Additional Year of Teaching for 240,000 Retarded Pupils Would Cost \$6,400,000.

Exactly 180,000 children were included in a survey of age and grade distribution of pupils in Ohio schools which is reported in a recent number of Better Schools Bulletin, a publication of the Ohio State Department of Education. Approximately one-fourth of them (24.5 per cent) are not as far advanced as they should be for their age.

Assuming that this rate of retardation prevails throughout the State, the conclusion is that about 240,000 children in Ohio are behind their proper grade at least one year, says the Bulletin. Many of them are much more retarded than that. That means that all those children will require at least nine years, instead of eight, to complete the elementary course, and the State of Ohio must pay the bill for the additional year. To teach so many children for a year requires 8,000 teachers, allowing a teacher for each 30 pupils. Even at the minimum Ohio salary, \$800, the cost is \$6,400,000 for teaching alone. The cost of supervision, of buildings, of equipment, and of upkeep must be added.

Many of the retarded pupils drop out before they finish the eighth grade, as a matter of fact, and not all of them have the extra year of schooling. This student mortality, however, is another form of waste that is even more appalling than the financial waste. The cost to society of so many half-educated citizens is bound to be tremendous. From any view, retardation presents a serious aspect.

The working library of Dr. William Torrey Harris, who was United States Commissioner of Education from 1889 to 1906, has been recently acquired by the library of Brown University. The books number 3,000, besides many classified pamphlets, and represent the original owner's paramount interests—philosophy, education, and lexicography.

EDUCATION FOR AMERICANS IN CHINA.

(Continued from page 1.)

times the mother returns to America with her children, and this means a still more serious breaking up of the family.

Many Return to Educate Children.

None of these attempts at solution has worked out satisfactorily so far as the children themselves are concerned. The children who are given home education in China grow up without that knowledge of American ideals and traditions which should be the possession of every American citizen. Those who are sent back to America for their school life lose those home influences which are as important as school discipline in forming character. Many Americans, finding their children arriving at school age, have, at great sacrifice to themselves and injury to American interests, given up their homes in China and returned to America to live. It is noteworthy that the American population in Shanghai is constantly changing—new people come out and old ones go home. A large proportion of these changes are caused by the lack of school facilities. The injustice to the missionary community is particularly noticeable, for the missionaries, by voluntarily exiling themselves, deprive their own children of the education which their presence in China enables them to offer to the Chinese.

Increases Expenses of American Firms.

It may be pointed out that the great expense of sending American children home to be educated adds to the cost of living for the American in China, and must eventually add to the overhead charges of American firms doing business in China. English and Continental families are able to live in China on much smaller incomes than Americans because they do not have to meet this extraordinary and heavy expense.

Other nationalities in China have met and solved this problem. In the French municipality of Shanghai there is a large and well-kept French school built at a cost of \$100,000, with room to accommodate about 250 pupils. This was built and is maintained by the French municipality. The instruction, of course, is in the French language, and it offers to French children about the same educational facilities they would receive at home. The French have recently secured a fine location for a large boarding school for French children from all parts of China. The Germans have also built a handsome school. The latest addition to the national schools of Shanghai is the Japanese school, built at a cost

of about \$200,000 and adequate to accommodate 1,400 pupils. Money for the construction of this school was contributed by a Japanese living in Japan.

The International Settlement of Shanghai maintains a number of schools in which instruction is given in the English language, and these schools are largely attended by children of British parentage; but the schools are not suitable for Americans, as the course of instruction is modeled along English lines, and does not prepare for entrance to the colleges and universities of America. Scandinavians in Honan Province have built and equipped a large school at Kikungshan.

Small School Established in 1912.

Missionaries undertook a solution of this problem by the establishment in 1912 of a small American school in Shanghai. The school was opened with an attendance of about 60 pupils. The school course is American in its characteristics, and, inadequate as the facilities have been, it has grown until now the attendance is more than 200. It is housed in rented quarters, which are poorly adapted to school use and is located in a very undesirable section of Shanghai. The existence of this school, however, has served to emphasize the need for larger and permanent quarters and has proved that an American school, properly equipped, will be successful and self-supporting.

A campaign to secure funds for the expansion of this school was begun some time ago and has met with encouraging success. Various mission boards, in order to do justice to the children of their representatives in China, are appropriating sums of money to meet about half the cost of the buildings, which will be \$300,000 gold. It is hoped that other interests will make up the other half.

During the past year a campaign in Shanghai to secure the funds necessary to purchase the site for the school yielded subscriptions amounting to 105,000 taels toward the total of 150,000 taels needed to buy about 16 acres accessible to the American residential community.

GYMNASIUM CREDIT GIVEN FOR HIKING.

As a stimulus to the recently reorganized student outing club at the Pennsylvania State College, the department of physical education has agreed to give credit for gymnasium drill to all freshmen and sophomores who "hike" 100 miles between now and the end of the term. Those electing to hike must register their preference with the department and an accurate record will be kept of the distance covered by each student.

ASSOCIATION INCOPORATED TO AID PUBLIC SCHOOLS.

Community Organization Proposes to Raise Endowment Fund and to Stimulate Public Sentiment.

Upon the idea that it is more worthy to endow a public school than a chair in a university, the School Building and Endowment Association of Litchfield, Conn., was organized and incorporated.

Its constitution thus summarizes the purposes of the organization.

1. To stimulate and create public sentiment in favor of good schools in Litchfield.

2. To raise and disburse funds for the erection and equipment of suitable school buildings, either independently or in conjunction with the town of Litchfield.

3. To create and maintain a fund the income from which shall be used as an endowment to maintain such buildings and equipment as shall have been provided by the association and for other purposes connected with said schools as the association shall direct. Such endowment fund shall be used either independently or in conjunction with public money of the town of Litchfield.

4. To own, hold, and enjoy as the legal custodian of said fund, or as trustee, real and personal property of every description, and to dispose of and disburse the same for the purposes and in the manner herein provided.

5. To help in every possible way to maintain high standards of education in Litchfield.

"AVOID RISKS AND SAVE GASOLINE."

"Take no risk whatever when children are in your charge" is the strict injunction given to the drivers of school trucks by T. L. Head, assistant superintendent of public schools of Montgomery County, Ala.

Every possible safeguard is thrown around the transportation system of the county, and a rule has recently been promulgated forbidding any truck carrying school children to pass over any wooden bridge at a speed greater than five miles an hour.

Eighteen trucks are in use in the consolidated districts of Montgomery County, and a careful record is kept of the operation of each of them. In the week covered by the last report received by the Bureau of Education the "gas mileage" shown was from 9 to 14.92. Eleven trucks made more than 10 miles per gallon of gasoline, and their drivers' names were placed on an honor roll in recognition of that fact.

PUBLIC-SCHOOL BUILDINGS IN BAD CONDITION.

Second Publication in "Know and Help Your Schools" Series Deals With Material Equipment.

Many thousands of school children are housed in old, insanitary, dangerous buildings, many of them being classified as fire-traps, according to the second installment of the "Know and help your schools" inquiry, which was made public recently. The inquiry is directed by the National Committee for the Chamber of Commerce Cooperation with the Public Schools and the American City Bureau.

The report not only discusses the status of school buildings and grounds, but deals with enrollment and sizes of classes. The executive committee, of which Dr. George D. Strayer is chairman, says in a "foreword" to the report:

"It is distressing to note that one-half of all of the buildings covered by this inquiry have less than 34 square feet of playground space per child. Students of physical education have long maintained that adequate play space requires from 100 to 200 square feet per pupil. It is clear that in many cities children are now housed in buildings in which there is less space on the playground than is supplied in the classrooms in which they are taught.

"The advantages that come from play both in terms of normal physical growth and development, and from the social training which can be secured nowhere else to so great advantage, should be guaranteed to all American boys and girls."

In regard to enrollment, the committee writes:

Only 36 Per Cent Remain at 16.

"For every 100 boys and girls enrolled at 9 years of age, we can count on only 94 being present when they reach 13 years of age; 81 of them at 14 years of age; 62 of them at 15 years of age; and 36 of them at 16 years of age. If all boys and girls are to have an opportunity to prepare for the vocations which they enter, and if American ideals are to be taught to all American boys and girls, it will be necessary to extend greatly our program of secondary education and of continuation schools. It is gratifying to know that increases in attendance for both the junior and senior high schools have occurred during the period of the inquiry, but it is clear that we still have the problem of providing education for a large percentage of boys and girls beyond 14 years of age."

Summarizing its conclusions the committee says:

"Lack of building accommodation is mainly responsible for large classes. Forty per cent of all elementary school classes have 40 or more pupils each. Twenty per cent of all kindergarten classes have more than 50 pupils. Eleven per cent of all junior and senior high school classes exceed 35 pupils each. In such large classes the individual pupil can not be given the care and personal instruction to which he is entitled.

Little Play Space in Cities.

"Very little playground space is provided for city school children. Half the children reported have less than a 6 by 6 foot plot each for their recreational and athletic activities. Only 19 per cent of them have as much as the standard minimum of 100 square feet. The most favored child of the lowest fourth has only 12 square feet, less than is allotted to him in the classroom.

"Half the children reported are housed in buildings, with their additions, erected more than 22 years ago. One building of every four now in use was built before 1886. Most of the buildings housing half of these children are unsanitary, inadequately lighted, badly heated and ventilated, and do not have rooms that can be converted properly into the shops, laboratories and gymnasiums which are essential to the kind of education now demanded in progressive cities.

One Building in 20 Is Fireproof.

"Very few school buildings are fireproof. Forty-four per cent of all buildings reported have brick or masonry walls, but the material of all floors, ceilings, partitions, and stairways is combustible. Twenty-one per cent are wooden frame buildings. At least 30 per cent of the children in these cities are housed in buildings of more than one story of these two types just described. Only 5 per cent of the total number of buildings are of the types of construction usually called fireproof.

"Although this large percentage of school buildings are nonfireproof, only a small number have fireproofing elements to lessen the fire hazard to the children. In only 18 per cent of the two poorest types of buildings is the heating apparatus in a fireproof inclosure. At least 25 per cent of the buildings of these two types are of two or more stories and do not have a fire escape. Thirty-nine per cent of these two types are without fire extinguishers, and less than 10 per cent of them have automatic sprinkler equipment in any part of the buildings. Only 11 per cent have automatic fire alarms. Such facts as these demonstrate the existence of a real menace to the children of these cities."

AGRICULTURE IN SECONDARY SCHOOLS.

New Report of Commission on Reorganization of Secondary Education—Home Projects Urged.

Outlines for the study of agriculture in secondary schools are contained in a bulletin issued recently by the United States Bureau of Education, consisting of a report on the subject by the commission on reorganization of secondary education appointed by the National Education Association. The outlines are suitable for use in a four-year or six-year course and include statements of the aims, methods, and materials of courses in farm crops, horticulture, animal husbandry, poultry, farm engineering, and farm management. It is assumed that pupils have had nature study, or elementary science, and, in some cases, a course in the essentials of agriculture in the elementary schools.

Group and Individual Projects.

The subjects are presented with the expectation that the order of study will be changed to suit local conditions and the needs and capacities of the students.

Cultivation of a school farm and the use of home projects wherever possible are urged, and group projects and individual projects are suggested. By the use of farms near the school, substitutes for home projects may be obtained which are of decided educational value and should receive school credit as home projects.

"Before attempting extension work," the report continues, "those responsible for conducting it should study the agriculture of the community to learn what is done and what is worth while in each locality. Not every high school in agriculture is qualified to do extension work. The instructor should first show in the teaching of his pupils that he is competent to extend his instruction to the patrons of the school. Extension efforts should be the result of work rather than the beginning of work." Definite suggestions are made of well-planned activities which direct extension work should include.

The purpose, types, and organization of school exhibits are discussed. The bulletin also includes advice in regard to the use of reference material.

The publication is entitled "Agriculture in Secondary Schools," is listed as Bulletin, 1920, No. 35, and may be obtained from the Superintendent of Documents, Government Printing Office, at 10 cents a copy.

SALARIES IN TEACHER-TRAINING INSTITUTIONS.

Eleven Presidents Receive \$6,000 or More—All Sections of Country Represented in List.

Increase of salaries paid in 1920-21 to presidents and members of the faculties of State-supported teacher-training institutions over salaries paid in 1915-16 is thus shown by statistics compiled recently by George F. Zook, specialist in higher education, United States Bureau of Education:

Salaries of presidents of certain teacher-training institutions.

Name of institution.	Salary in 1920-21.	Salary in 1915-16.
State Normal School, Terre Haute, Ind.	\$7,500	\$6,000
State Normal School, Indiana, Pa.	7,200	6,000
Central Michigan Normal School, Mount Pleasant, Mich.	7,000	3,500
State Teachers College, Kirksville, Mo.	6,500	4,000
Tempe Normal School, Tempe, Ariz.	6,300	3,800
State Normal School, San Jose, Calif.	6,000	4,500
State Manual Training Normal College, Pittsburg, Kans.	6,000	4,000
Western Kentucky State Normal School, Bowling Green, Ky.	6,000	4,200
Central Missouri State Teachers College, Warrensburg, Mo.	6,000	4,000
North Carolina College for Women, Greensboro, N. C.	6,000	4,000
Marshall College, State Normal School, Huntington, W. Va.	6,000	3,600
State Normal College, Kent, Ohio	5,500	4,500
State Normal School, La Crosse, Wis.	5,500	4,250
Fresno State Normal School, Fresno, Calif.	5,400	4,500

Most Frequent Salary Is \$5,000.

Twenty-five schools reported salaries of \$5,000 for 1920-21; 3 of \$4,800; 1 of \$4,538; 6 of \$4,500; 3 of \$4,200; and 10 of \$4,000. Of the 73 institutions included 11 reported salaries of less than \$4,000, of which the lowest two are \$2,940 at the Prairie View State Normal and Industrial College (colored), Prairie, Tex.; and \$3,200 at the State Normal School, Farmington, Me.

The highest salaries are paid professors in the following schools:

Highest salaries paid to professors in certain teacher-training institutions.

Name of institution.	Highest salary in 1920-21.	Highest salary in 1915-16.
Central Michigan Normal School, Mount Pleasant, Mich.	\$5,000	\$2,500
North Carolina College for Women, Greensboro, N. C.	4,000	3,000
State Normal School, Oneonta, N. Y.	4,000	2,600
State Normal School, Cortland, N. Y.	4,000
State Normal School, Terre Haute, Ind.	3,900	3,174
State Normal School, Peru, Nebr.	3,630	1,815
Marshall College, State Normal School, Huntington, W. Va.	3,600	1,800
State Normal School, Natchitoches, La.	3,600	2,250
State Normal School, River Falls, Wis.	3,600	2,500
State Normal School, Oswego, N. Y.	3,500	2,500

The highest average salary of professors, \$4,300, was reported by the Central Michigan Normal School, Mount Pleasant, Mich.

Of institutions in which no distinction is made between professors and instructors the highest salary, \$3,800, is paid at the State Normal School, La Crosse, Wis.

Largest salaries of critic teachers were reported from the following schools:

Salaries of critic teachers in certain teacher-training institutions.

Name of institution.	Salary in 1920-21.	Salary in 1915-16.
State Normal School, Cortland, N. Y.	\$2,700
State Normal School, Oneonta N. Y.	2,600	\$1,000
Central Michigan Normal School, Mount Pleasant, Mich.	2,500	1,200
State Normal School, Terre Haute, Ind.	2,420	2,100
Tempe Normal School, Tempe, Ariz.	2,400	1,500

A maximum salary of \$2,200 for critic teachers was reported by five schools, of \$2,000 by six, of \$1,900 by two, of \$1,800 by five, of \$1,600 by eight, of \$1,500 by three, and of \$1,400 by four. The highest average salary for critic teachers, \$3,000, was reported by Central Missouri State Teachers College, Warrensburg, Mo. The maximum salary for critic teachers was not reported for this institution and it was not included in the compilation of the preceding table.

SOME FACTS ABOUT OREGON COUNTIES.

Hood River County employs 76 teachers, and only four of them teach in one-room schools; one of the four receives \$140 a month and another receives \$130.

Salaries in Lane County are 100 per cent higher than two years ago.

Lincoln County and Tillamook County provide play sheds for use on rainy days—of which there are many.

Umatilla County has 14 "teacherages," containing from 2 to 10 rooms each.

Douglass County pupils organized 73 industrial clubs, with 574 members. They completed work valued at \$19,227; the cost of production was \$10,647, leaving a net profit of \$8,580.

Hot lunches provided by the schools are reported from many rural schools throughout the State. It is said that in no instance has the plan been unsuccessful.

The first convention of Chilean students was held recently in the University of Chile in Santiago. Discussions were held and resolutions passed concerning the aspirations and future of Chilean students.

INSTITUTE SOLVES INDUSTRIAL PROBLEMS.

Contracts with Manufacturing Concerns Make Facilities of Institution Directly Available to Industry.

Successful operation of the "Technology plan" during the first year of its existence is shown by the report just issued by the division of industrial cooperation and research of the Massachusetts Institute of Technology.

During the year 1920 the institute entered into contracts with 204 manufacturing concerns which enabled the manufacturers to obtain the aid of the institute and its faculty in solving their manufacturing and scientific problems. The annual retaining fees involved in the contracts amounted to more than a quarter of a million dollars.

The intimate contact established with progressive manufacturing concerns has proved a great stimulus to the educational and research activities of the several departments of the institute, the report says. At the time of the establishment of the Technology plan, the impression prevailed among some educators that the work entailed in the execution of the contracts would stifle research in pure science, and would therefore in the end prove a detriment rather than an aid in the scientific progress of the community, but this view, the report declares, has been found entirely erroneous.

STUDENT POLICE FORCE IN HIGH SCHOOL.

De Witt Clinton High School, New York City, is governed largely by the students, and the chief disciplinary medium is the "Dotey Squad." The squad was organized in 1910 by Aaron L. Dotey, and since that time he has been its faculty adviser.

The members of the squad are upper-term boys, who are selected by an examination of a severe nature, which must satisfy requirements as to character, service, scholarship, personality, and other factors that contribute to ability in leadership. A list of eligible candidates is prepared each term.

The great tasks which the Dotey Squad perform so admirably and methodically are those of maintaining order on the school premises and at school affairs, directing the traffic in the buildings, and in general acting as a well-organized police force. The headquarters of the force is located in a room where Mr. Dotey reigns supreme and administers punishment and justice in a strictly legal manner.—Evening Mail.